

Date: Wednesday, 1/30/2008 7:57:20 AM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : WHEEL SHAFT
Job Number : 37086	
Estimate Number : 10449	
P.O. Number :	Part Number : D33341
This Issue : 1/30/2008 S.O. No. :	Drawing Number : D3334 REV. B1
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : MACHINED PARTS	Drawing Revision : B1
Previous Run : 34795	Material :
Written By : <u>[Signature]</u>	Due Date : 2/18/2008 Qty: <u>7</u> <u>12</u> Jm: Each
Checked & Approved By : <u>[Signature]</u>	
Comment : Est: B 05.03.02 Revised material; Added Powder Coat K J/JLM	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M4140HR3500	4140 Heat Treated Bar
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Comment: Qty.: 0.6563 f(s)/Unit Total : 7.8756 f(s)

4140 HEAT TREATED BAR

Material: AISI 4140 or ASTM A304-02/A-434-BC/A193-03-Grade-B7/A29-03/A322-91 or UNS# G41400

(M4140H-R3.500)

Batch: M105801

[Signature]
08.03.05

2.0	MORI SEIKI	MORI SEIKI CNC LATHE LARGE
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Comment: MORI SEIKI

1- Cut blanks: Ø3.500" Bar to 7.750" long

2- Turn as per Folio FA492 and Dwg D3334

3- Deburr

[Signature]
08.03.05

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

[Signature]
08.03.05

4.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS1

Machine as per Folio FA492 and Dwg D3334

Identify as D3334-1

N/A
[Signature]

5.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

N/A
[Signature]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: JD Date: 01/03/09
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 1/30/2008 7:57:20 AM
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WHEEL SHAFT

Job Number: 37086

Part Number: D33341

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC8

SECOND CHECK



Comment: SECOND CHECK

08-05-06 (7)

7.0

POWDER COATING

POWDER COATING



M 180 52



(7X)

Comment: POWDER COATING

Powder Coat Fire Red (Ref: 4.3.5.10) as per QSI 005 4.3

Mask thread and bearing surface

M.H. 08/03/06

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



MS



Comment: INSPECT POWDER COAT

08-03-06

(7X)

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 494

8/3/06

54

(7X)

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/03/07

Job Completion



2008/3/07

(7)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

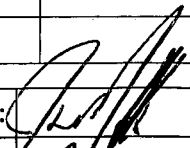

NOTE: Date & initial all entries


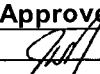
DART AEROSPACE LTD		Work Order:	37086
Description: Wheel Shaft		Part Number:	D3334-1
Inspection Dwg: D3334 Rev: B1		Page 1 of 1	





FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
7.468	+/-0.010	7.471	✓			
0.94	+/-0.030	.945	✓			
0.200	+/-0.010	.195	✓			
Ø0.129	+0.005/-0.000	.132	✓			
4.740	+0.000/-0.030	4.727	✓			
1.04	+/-0.030	1.042	✓			
Ø1.750	+/-0.010	1.749	✓			
0.750	+/-0.010	.752	✓			
1.180	+0.000/-0.002	1.1785	✓			
2.250	+/-0.005	2.246	✓			
1.125	+/-0.010	1.1225	✓			
3.060	+/-0.010	3.053	✓			
Ø0.386	+0.005/-0.000	Ø.390	✓			
1.300	+/-0.005	1.296	✓			
Ø3.470	+/-0.010	3.471	✓			

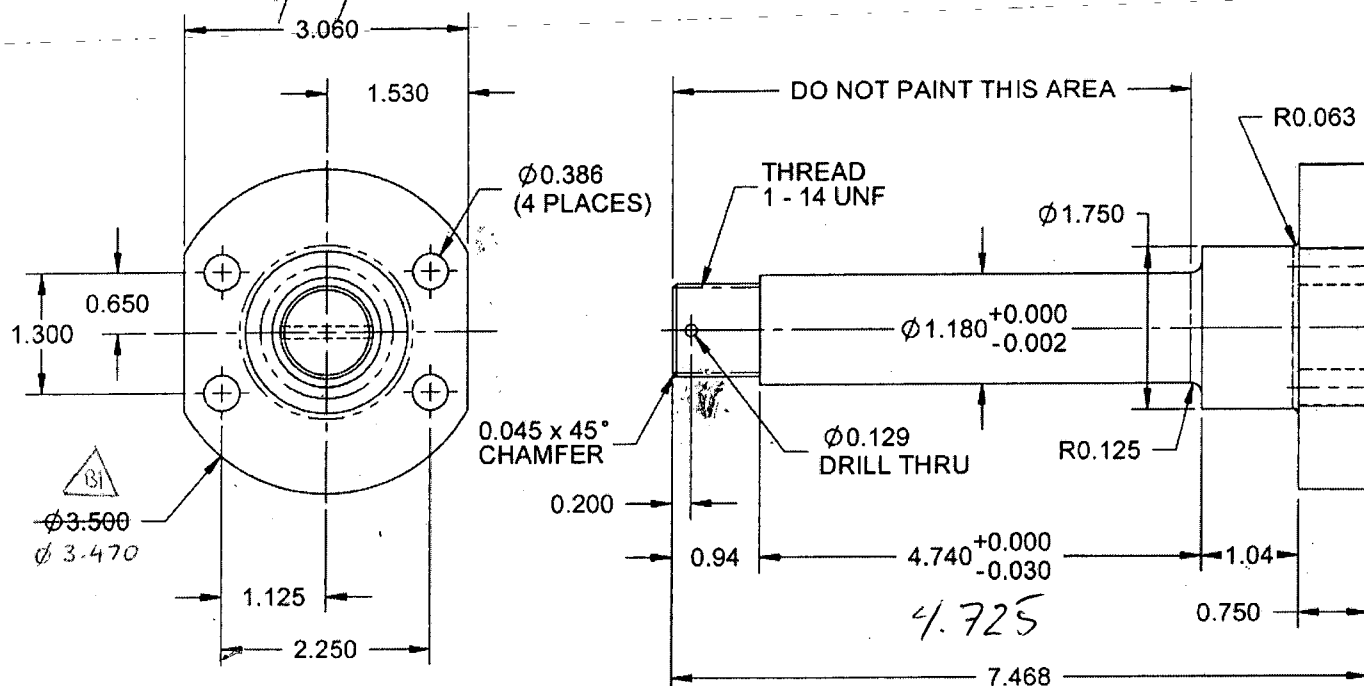
Measured by: 	Audited by: 	Prototype Approval:	N/A
Date: 08.03.06	Date: 08.03.06	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	05.04.26	New Issue	KJ/JLM 	

DESIGN 	DRAWN BY 	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 	APPROVED 	DRAWING NO. D3334	REV. B SHEET 1 OF 1
DATE 05.02.18		TITLE WHEEL SHAFT	SCALE 1:2
A	04.12.16	NEW ISSUE	
B	05.02.18	REDESIGN TO FIT NEW WHEEL ASSY	
BI	05.03.03	Ø3.470 WAS Ø3.500	

RELEASED

05/02/22



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 37086

D3334-1 WHEEL SHAFT

NOTES:

- 1) MATERIAL: AISI-4140 OR ASTM A304-02/ A-434-BC/ A193-03-GRADE-B7/ A29-03/ A322-91
OR UNS#-G41400 (REF. DART SPEC. M4140H-R3.500)
2) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES
5) BREAK ALL SHARP EDGES 0.010 TO 0.020

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